"Tools for Schools"
OPI Methamphetamine Prevention Education Project
Grades 9-12
Teacher's Lesson Plan

Title: Meth Basics
Audience: Grades 9-12
Learner Objectives

Students will -

- Understand the general characteristics of methamphetamine
- Understand the health effects of using methamphetamine
- Define precursors and common ingredients of meth manufacturing
- Understand the risk associated with approaching a meth lab

Life Skills Taught

- Decision-making
- Critical thinking
- Responsibility

Materials Needed

- Computer with PowerPoint capability
- Computer projector for PowerPoint presentation
- Projection screen
- Department of Justice and MSU Extension Service, *Meth in Montana* information booklet

Presentation Time

- 30 minutes
- This presentation requires instructor facilitation.

Teaching Tips

Here are some tips for leading this lesson:

- For background of the meth issue in Montana review the information booklet, *Meth in Montana* available from the MSU Extension Service.

- Preview the PowerPoint presentation before presenting it and know when to click forward on each slide and when to wait for animation.
- This lesson deals with the basics of meth. Students are typically curious about how meth is made and how it is used. Be clear on what the lesson is and isn't. Some topics students want to know are not included in this lesson.
- Use the lesson as a guide. Use it to meet the needs for the students and feel free to experiment with the delivery of this information.

PowerPoint Basics

PowerPoint is a modern method of presenting a slide program without a slide projector and also provides animation and sound. There are lots of manuals that teach the basics of using this program. Here are some basic tips for effectively using PowerPoint as an educational tool:

F5—pressing this key is a simple method to activate the slide show from the beginning. You can accomplish the same thing by moving your mouse over the "slideshow" icon in the lower left-hand corner of your screen.
ESC—hitting the "escape" key will end a program.
Shift-B—hitting these keys will create a black screen. Use if you want to stop in the middle of a program and have a discussion without having a distracting image on the screen. Hit it again to return to the PowerPoint presentation.
Shift-W—hitting these keys will create a white screen. Like the black screen command described above, you can hit these keys to return to the program when you are ready.
ALT-Tab—by holding down the ALT key and pressing the "Tab" key, you can easily move between a PowerPoint program and other programs on your computer.
Down-Arrow Key—this key is used to move forward in the slide show, and except for self-timed programs, must be used to advance from one slide to the next.
Up-Arrow Key—this key is used to move backwards in the slide show to the previous slide.

Introduction

This lesson provides an overview of methamphetamine:

- what is meth and how it is used
- effects of meth on users
- typical chemicals used make meth
- meth lab cautions

PowerPoint with Notes

Slide 1. Series Slide

Slide 2. Meth Basics 101 with Matt McThane

(Hit the down-arrow key just once to activate the animation. When the "teacher" moves back to the left, you can hit down-arrow again to advance to the next slide.)

Slide 3. Micromatic Microwave

Newspaper Articles - Meth is a growing problem throughout Montana.
(With this slide, the microwave timer counts down from five, and at "end" you should click your mouse on the "Click Here" button. This will automatically bring in a series of newspaper articles that indicate the scope of the problem in Montana.)

Slides 4 and 5. Montana and Meth - Did you know?

(Hit the down-arrow key four times to bring in each of these points on the slide. Here is additional information that you could add.)

- 8.3 percent of Montana high school students admit ever using methamphetamine, compared to 7.6 percent of young people nationwide. *(2005 Montana Youth Risk Behavior Survey)*

- The number of admissions to state-approved chemical dependency treatment providers in Montana in which the patient listed methamphetamine as his or her primary drug: *(Montana Department of Public Health and Human Services)*
    - 734 in 2000
    - 820 in 2001
    - 903 in 2002
    - 1,012 in 2003
    - 1,124 in 2004

- Of the 1,124 patients who named meth as their primary drug in 2004: *(DPHHS)*
    - 545 (48 percent) named injection as the primary route of use
    - 481 were men, 452 were women
    - Almost 65 percent were ages 18 to 34

- According to data from the U.S. Sentencing Commission: *(U.S. Sentencing Commission, Office of Policy Analysis)*
    - 48.3 percent of federal sentences in Montana were drug-related
    - 74.4 percent of those, as compared to 15.5 percent nationally were meth related

- In federal fiscal year 2004: *(Drug Enforcement Agency)*
    - 63 Montana meth labs required removal of hazardous material by a specialized contractor. Cost to taxpayers was $194,230.

- In federal fiscal year 2002: *(DEA)*
    - 122 Montana meth labs required removal of hazardous material by a specialized contractor. Cost to taxpayers was more than $1 million.

- The top five conviction offenses for women in the Montana Women's Prison include possession of drugs (no. 1) and sale of drugs (no. 5). Theft, forgery and bad checks -crimes that may be related to meth use and sale - are the other three. *(Montana Department of Corrections)*

(Hit the down-arrow key to activate the animation.)

Slide 6. Slang names for methamphetamine? (Hit down-arrow key twice.)

Methamphetamine is an extremely addictive powerful central nervous system stimulant.

The drug is referred to by many names including "meth," "speed," "crank," "chalk," "go-fast," "ice" and "zip." Pure methamphetamine hydrochloride, the smokeable form of the drug, is called "L.A." or - because of its clear, chunky crystals which resemble frozen water - "ice," "crystal," "glass," or "quartz."

Slide 7. History of Methamphetamine. (Hit down-arrow key twice.)

Methamphetamine was developed early in this century from its parent drug amphetamine and was originally used in nasal decongestants, bronchial inhalers, and in the treatment of narcolepsy and obesity. In the 1970s methamphetamine became a Schedule II drug - a drug with little medical use and a high potential for abuse. Since the 1980s, meth has been smuggled from Taiwan and South Korea into Hawaii, where use became widespread by 1988. By 1990, distribution of meth had spread to the U.S. mainland.

Slide 8. Why People Make the Wrong Choice to Use Meth (Hit down-arrow key just once.)

Athletes and students sometimes begin using meth because of the initial heightened physical and mental performance the drug produces. Workers may use the drug to work extra shifts, while young women often begin using meth to lose weight. Others use meth recreationally to stay energized at "rave" parties or other social activities. In addition, meth is less expensive and more accessible than cocaine and users often have the misconception that methamphetamine is not really a drug.

Slide 9. How is Meth Used? (Hit the down-arrow key five times.)

- Meth can be smoked, snorted, injected or swallowed.
- Meth is illegally produced and sold in pill form, capsules, powder and chunks. Methamphetamine is odorless, bitter-tasting and crystalline, and may be white or very light pink or yellow. It dissolves easily in water or alcohol.
- Methamphetamine hydrochloride - crystal meth, or "ice" - is clear and chunky, like rock candy. It is a concentrated, pure, highly addictive form of the drug. Users heat it, then inhale the vapors released by the heat.

Slide 10. Age of First Use for Methamphetamine. (Hit down-arrow key twice.)

The data on the table are national statistics.

Slide 11. Deadly Appeal of Meth Use (and Effects of Meth Use on the Brain). (Hit down-arrow key seven times.)

The drug works directly on the brain and spinal cord by interfering with normal neurotransmission. Neurotransmitters are chemical substances naturally produced within nerve cells used to communicate with each other and send messages to influence and regulate our thinking and all other systems throughout the body.

The main neurotransmitter affected by methamphetamine is dopamine. Dopamine is involved with our natural reward system. For example, feeling good about a job well done, getting pleasure from our family or social interactions, feeling content and that our lives are meaningful and count for something, all rely on dopamine transmission.

Additional Information for Teachers:

Deadly Appeal of Meth Use.

Central Nervous System Side Effects. Even small amounts of meth can produce euphoria, increased alertness, paranoia, decreased appetite and increased physical activity. Other central nervous system affects include athetosis (writhing, jerky or flailing movements), irritability, extreme nervousness, insomnia, confusion, tremors, anxiety, aggression, incessant talking, hyperthermia, and convulsions. Hyperthermia (extreme rise in body temp. as high as 108 degrees) and convulsions sometimes can result in death.

Cardiovascular Side Effects. Use can produce chest pain and hypertension which can result in cardiovascular collapse and death. In addition, meth causes accelerated heartbeat, elevated blood pressure and can cause irreversible damage to blood vessels in the brain.

Other Physical Effects. Pupil dilation, respiratory disorders, dizziness, tooth grinding, impaired speech, dry or itchy skin, loss of appetite, acne, sores, numbness, and sweating.

Psychological Effects. Symptoms of prolonged meth abuse can resemble those of schizophrenia and are characterized by anger, panic, paranoia, auditory and visual hallucinations, repetitive behavior patterns and formication (delusions of parasites or insects on the skin). Meth-induced paranoia can result in homicidal or suicidal thoughts.

Slide 12. Cycle of Meth Use. (Hit down-arrow key six times.)

The drug alters mood in different ways, depending on how it is taken. Immediately after smoking or intravenous injection, the user experiences an intense "rush" or "flash" that lasts only a few minutes and is described as extremely pleasurable. Smoking or injecting produces effects fastest, within five to ten seconds. Snorting or ingesting orally produces euphoria - a high but not an intense rush. Snorting produces effects within three to five minutes, and ingesting orally produces effects within 15 to 20 minutes.

The most dangerous stage for users, medical personnel and law enforcement is “tweaking.” Tweaking occurs at the end of the high, when the user feels emptiness and anxiety, and nothing seems to take that feeling away, including taking more meth.

- A meth user who is tweaking has probably not slept in days, and could be irritable and paranoid.

- Confrontation increases the chances of violence, but provocation is not necessary for the user to behave or react violently.
- The effects and volatility may be intensified by the use of alcohol or other substances.

Long Term Effects of Methamphetamine Use. Fatal kidney and lung disorders, brain damage, liver damage, blood clots, chronic depression, hallucinations, cardiovascular problems, dental problems (including lost teeth), skin lesions or abscesses, violent and aggressive behavior, malnutrition, disturbed personality development, deficient immune system, increased risk of HIV and hepatitis (particularly for users who inject the drug) and methamphetamine psychosis, a mental disorder that may be paranoid psychosis or may mimic schizophrenia.

Slide 13. The "fictitious" page 397. (Hit down-arrow key twice.)

- *The beauty of Meth …* photos of meth user
- About 10 percent of people … self explanatory.

Slide 14 and 15. Meth Production. (Hit down-arrow key six times.)

Where Does Meth Come From in Montana?

While about 80 percent of the meth in Montana is produced in super labs in Mexico and California, the clandestine "home" lab processing required to make meth from precursor substances (like ephedrine) is easier and more accessible than ever.

Locally, especially in rural areas, clandestine manufacturing of methamphetamine is taking place. Clandestine labs known as "mom and pop" labs are found in rural, city and suburban residences; barns, garages and other outbuildings; back rooms of businesses; apartments; hotel and motel rooms; storage facilities; vacant buildings; and vehicles.

Slide 16. Would You Ever Want These Substances in Your Body? (Hit down-arrow twice.)

Making meth involves combining ephedrine or pseudoephedrine with other ingredients and cooking the mixture, then straining out some by-products. Other chemicals are added to extract the methamphetamine; then still others are added to convert it into an ingestible form.

Many of the chemicals used to make meth are found in common items like lantern fuel, household cleaners, nail polish remover, swimming pool cleaner and diet and

cold pills. Much of the equipment used in meth labs can be found in any home or garage or purchased at a drugstore or hardware store.

Slide 17. Precursors (Hit down-arrow three times.)

Precursors are ingredients that are essential to the production of a controlled substance and for which no substitution can be made. To produce methamphetamine ephedrine or pseudoephedrine is essential. In 2005, Montana passed a law regulating the sale of ephedrine and pseudosephedrine.

Slide 18. And Lastly, large tanks containing Anhydrous Ammonia … (Hit down-arrow once.)

One method of producing methamphetamine uses anhydrous ammonia, a substance typically used as a fertilizer. Meth producers may steal anhydrous ammonia from agricultural producers and retailers.

Signs that a theft of anhydrous ammonia has occurred:

- Partially opened tank valves and/or leaking tanks
- Reddish chemical-based stains around the tank
- Buckets, coolers, duct tape, garden hoses and bicycle inner tubes

Under a Montana law passed in 2005:

- Theft of any amount of anhydrous ammonia to make meth is a felony.
- The definition of "criminal possession of precursors to dangerous drugs" includes possession of anhydrous ammonia with intent to manufacture meth.

Another law passed in 2005 requires locks on anhydrous ammonia tanks and gives the Montana Department of Agriculture funds to provide them to anhydrous distributors.

Slide 19. Stay Away! (Hit down-arrow only once.)

Self explanatory.

Slide 20. Report (Hit down-arrow only once.)

If you suspect someone is making, using or selling meth, contact the sheriff's office or police department - CALL 911. Do not approach a suspected meth user or meth maker.

Slide 21. End Slide

Additional Activities

Meth Awareness Bulletin Board
Clip local and state newspaper articles related to meth to create an awareness bulletin board in your school.

Intercom Meth Messages
Review www.methfreemt.org to create messages for the school newsletter and intercom messages.

Video Viewing
Obtain these four videos from the ***Meth in Montana ... toolkit for community educators and teachers*** or the MSU Extension Service (994-3451) to show and discuss with students:

Video Title: ***Life or Meth - What's the Cost?***
Target Audience: Teens
Summary: A teenage view of meth involvement and use
Part 1: Caroline's Story
Part 2: Joseph's Story
Length of Video : 11:39 minutes
Produced by: Midwest HIDTA (High Intensity Drug Trafficking Area)
Date of Production: September 1998

Video Title: ***Life or Meth***
Target Audience: General Public
Summary: Good overview of the meth issue in rural mid-America. Includes interviews of meth users and impact of meth on children of meth users.
Length of Video : 16:00 minutes
Produced by: Midwest HIDTA (High Intensity Drug Trafficking Area)
Date of Production: 1998

Video Title: ***Myths About Meth***
Target Audience: Teens
Summary: Straight talk with teens asking meth questions to Dr. Alex Garza, MD
Length of Video : 10:24 minutes
Produced by: Midwest HIDTA (High Intensity Drug Trafficking Area)
Date of Production: 1998

Video Title: ***Amy's Story***
Target Audience: Teens
Summary: True story of Amy, a teen-age meth user. Amy talks openly about her use and consequences of using meth. Teens discuss making positive choices instead of meth use.
Length of Video: 20 minutes
Produced by: Midwest HIDTA (High Intensity Drug Trafficking Area)
Date of Production: 1989

A project of the Montana Office of Public Instruction,
Linda McCulloch, State Superintendent of Public Instruction
Funded by Attorney General Mike McGrath and the Montana Department of Justice

"Tools for Schools" was developed by the MSU Meth Education Partnership under a grant from the Montana Office of Public Instruction, Contract #OPI104-994P.

MSU Meth Education Partnership Design Team:
Dr. Kirk A. Astroth, Project Director
Dr. Sandra Bailey
Dr. Michael Vogel
Dr. Lynn Paul
Dr. Jeffrey Linkenbach
Dr. Gary Lande
Robin Siska
Mark Eggensperger

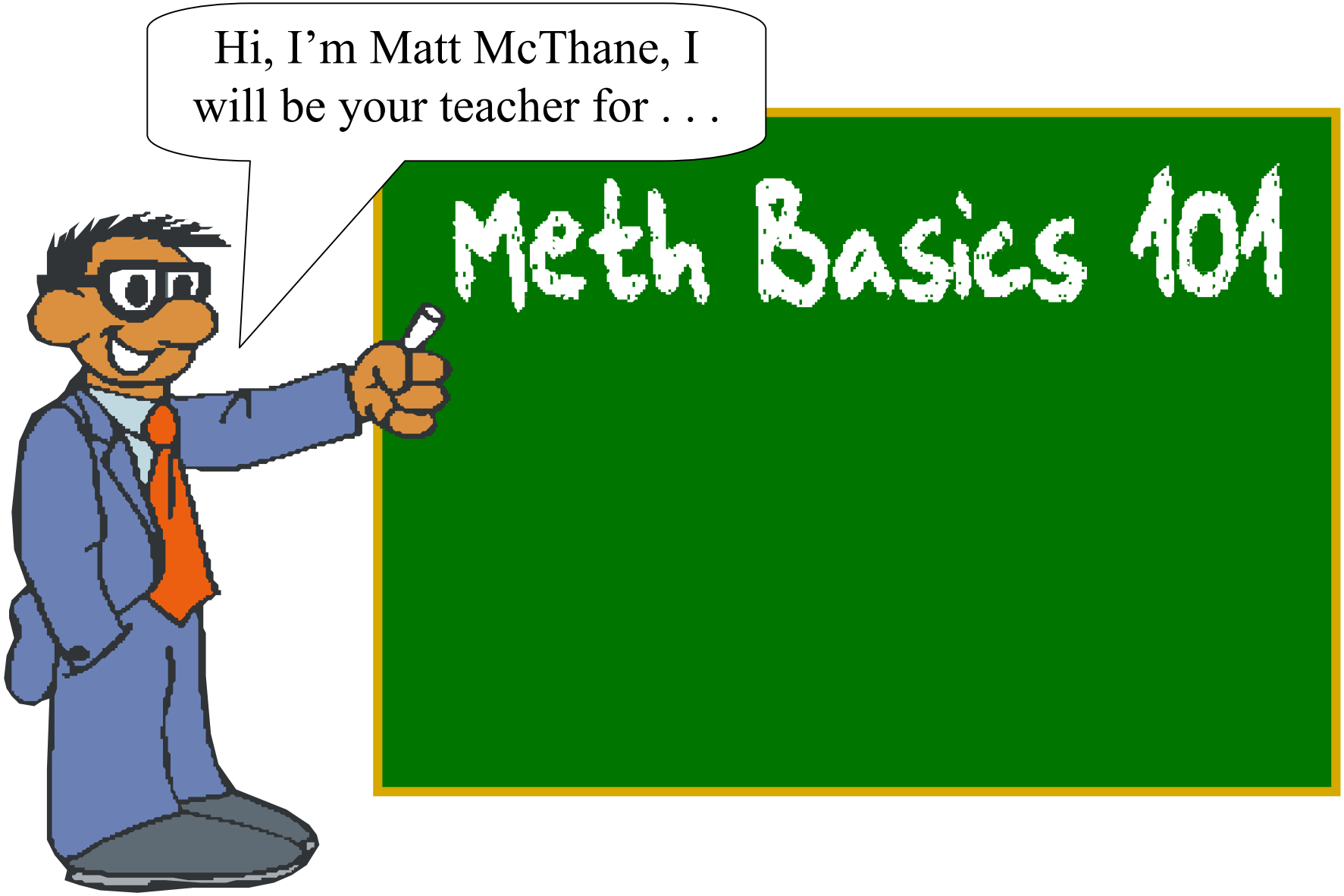
Tools for Schools

"Meth Basics"

Grades 9-12

OPI
Linda McCulloch, Superintendent
Montana Office of Public Instruction
PO Box 202501
Helena, Montana 59620-2501
(406) 444-3095
1-888-231-9393
Fax: (406) 444-2893
www.opi.mt.gov

A project of the Montana Office of Public Instruction,
Linda McCulloch, State Superintendent of Public Instruction
Funded by Attorney General Mike McGrath and the Montana Department of Justice


Hi, I'm Matt McThane, I will be your teacher for . . .
Meth Basics 101

Micromatic Microwave

This is what's been cookin' in Montana. Check out these headlines, they tell quite a story.

I'm a little hungry first, lets see what's cookin'.

1	2	3
4	5	6
7	8	9
Clear	0	Start

Click Here

Open

Montana and Meth

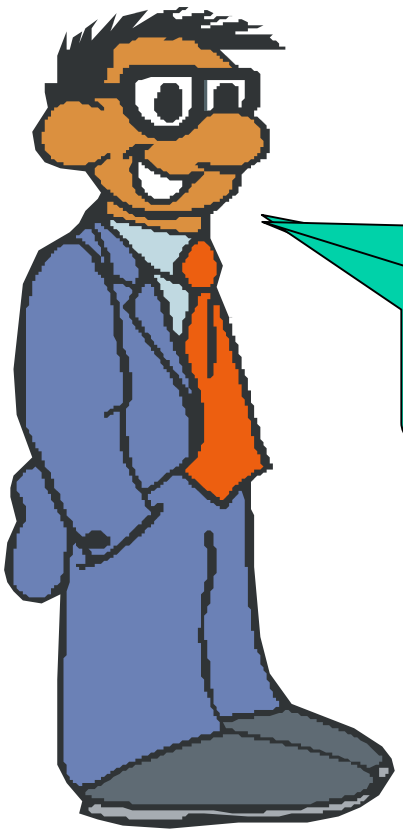
In 2005, 8.3 percent of Montana high school students reported having used meth in their lifetime

9 percent of the adult population reported using meth sometime during their life

67 percent of Montana women in prison are there on meth related charges

One Montana judge reported that he spent 61 percent of his time dealing with meth related cases

What Is Methamphetamine?



Meth is a synthetic nervous system stimulant

It can produce a high lasting anywhere from 2 to 16 hours

Meth is extremely addictive and can produce severe withdrawal symptoms

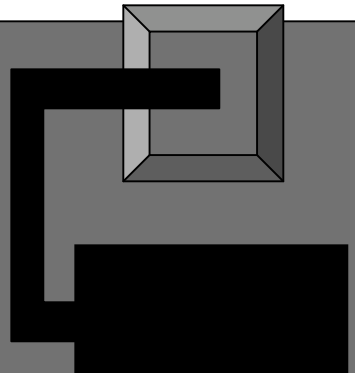
90 percent pure psychoactive drug compared to 60 percent in the 1960s

94 percent are addicted within 6 months of use

Slang names for methamphetamine?

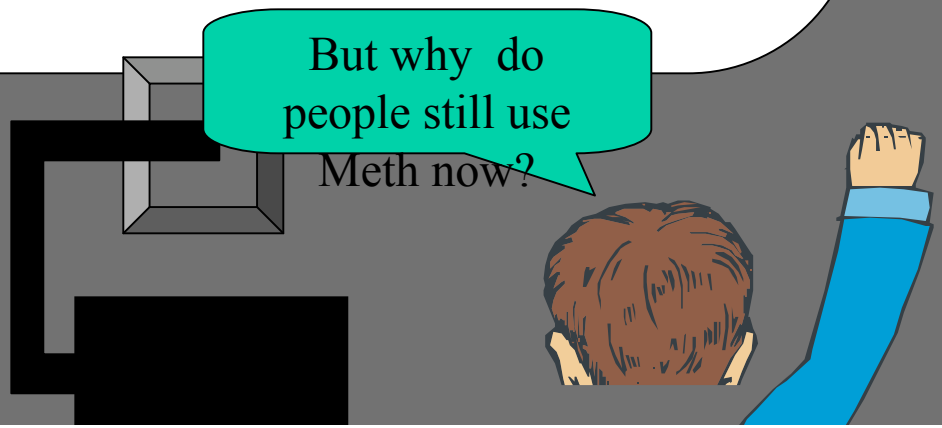
Now let's take a look at the history of Meth.

- *Zip*
- *Go-Fast*
- *Meth*
- *Crystal*
- *Glass Crank*
- *and many other names*



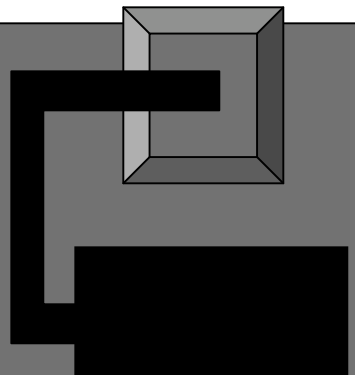
History of Methamphetamine

- 1887 - Amphetamines were first synthesized in
- first discovered in Japan
- 1940's - given to soldiers and factory workers in World War II
- 1950's - legally manufactured for use by college students, truck drivers and athletes
- 1960's - prescribed for weight loss
- 1970's - distributed by motorcycle gangs in California
- 1990's - epidemic of use due in part to availability



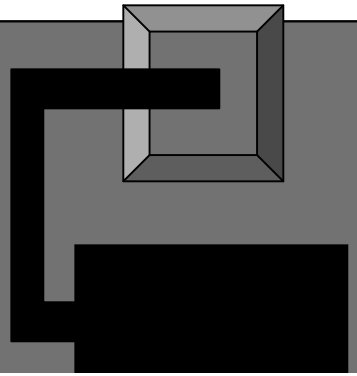
Why People Make the *Wrong Choice* to Use Meth

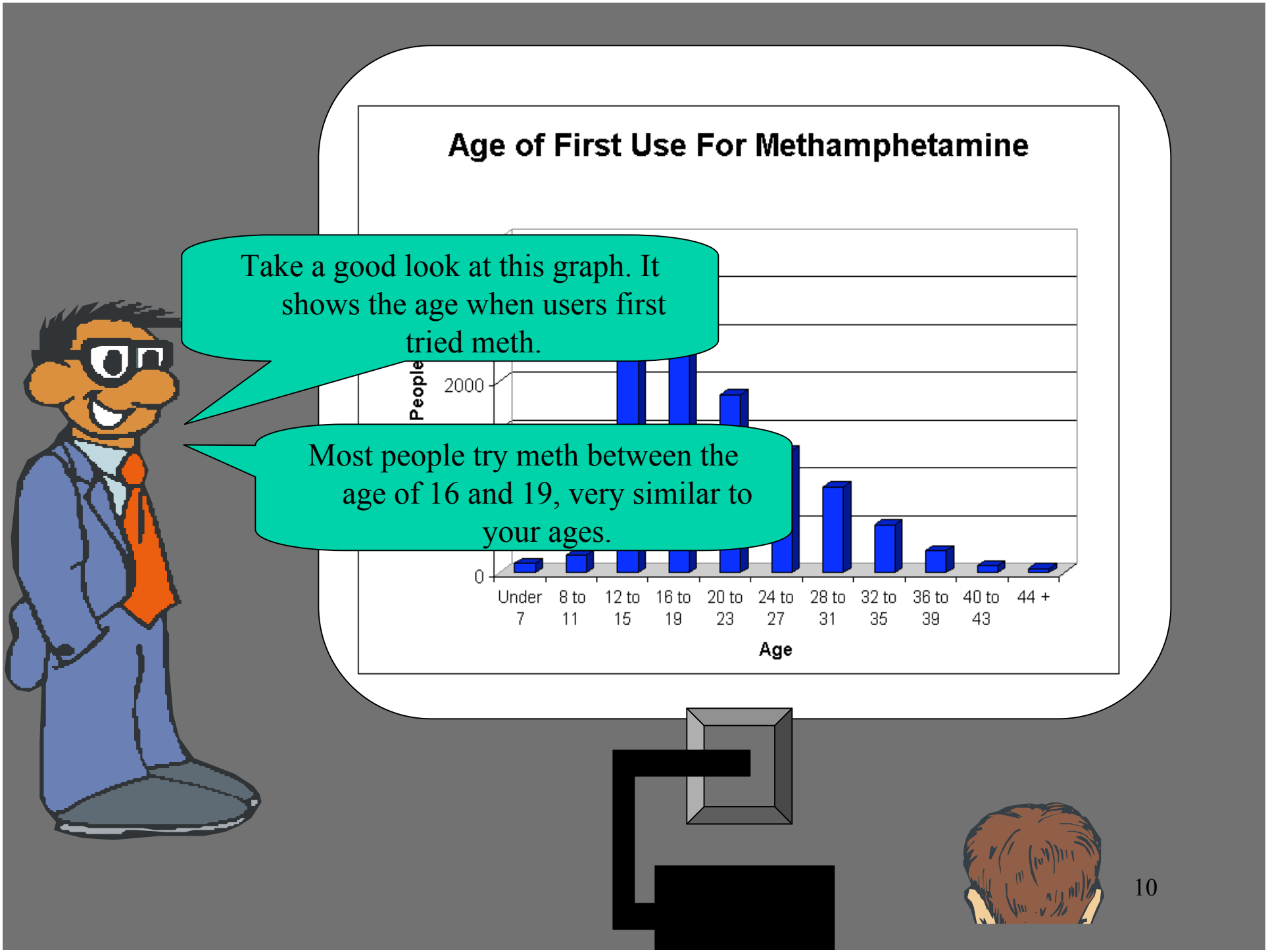
- Used by females who want to lose weight
- Used by workers who work extra shifts
- Used by athletes and students for heightened physical and mental performance
- Recreational use to stay energized at rave parties and other social activities
- Less expensive and more available than other drugs

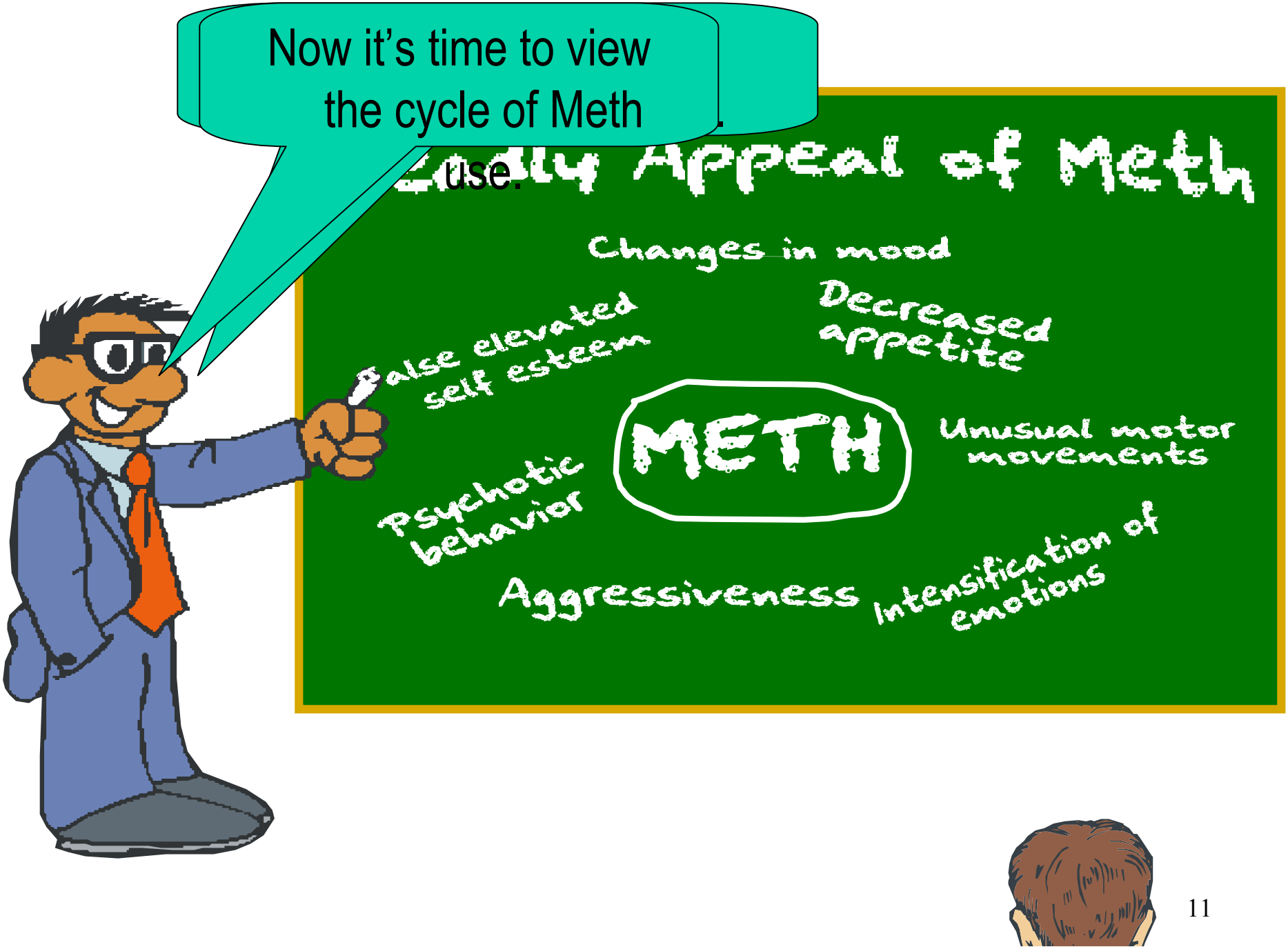


How is Meth Used?

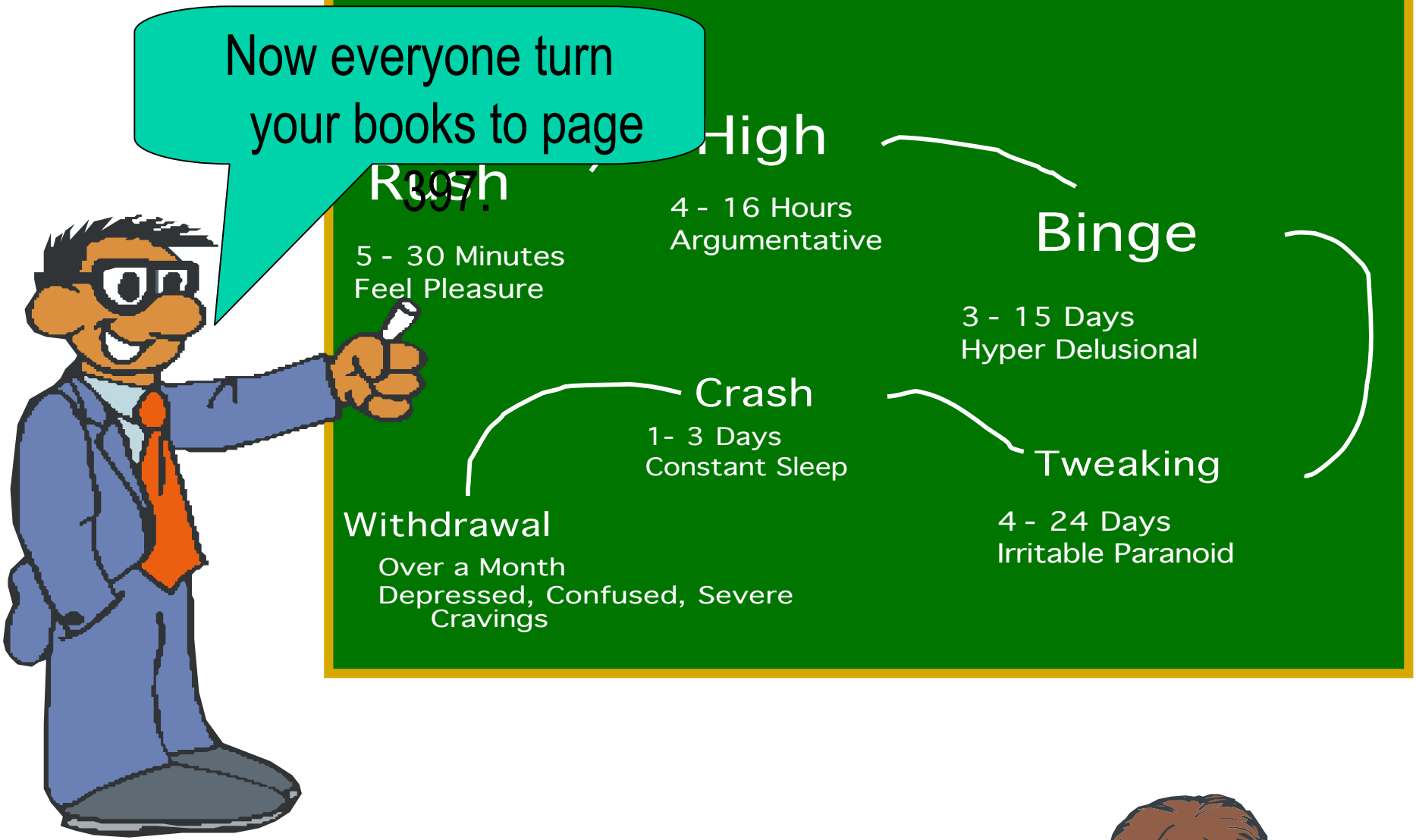
Alt ways
de aken



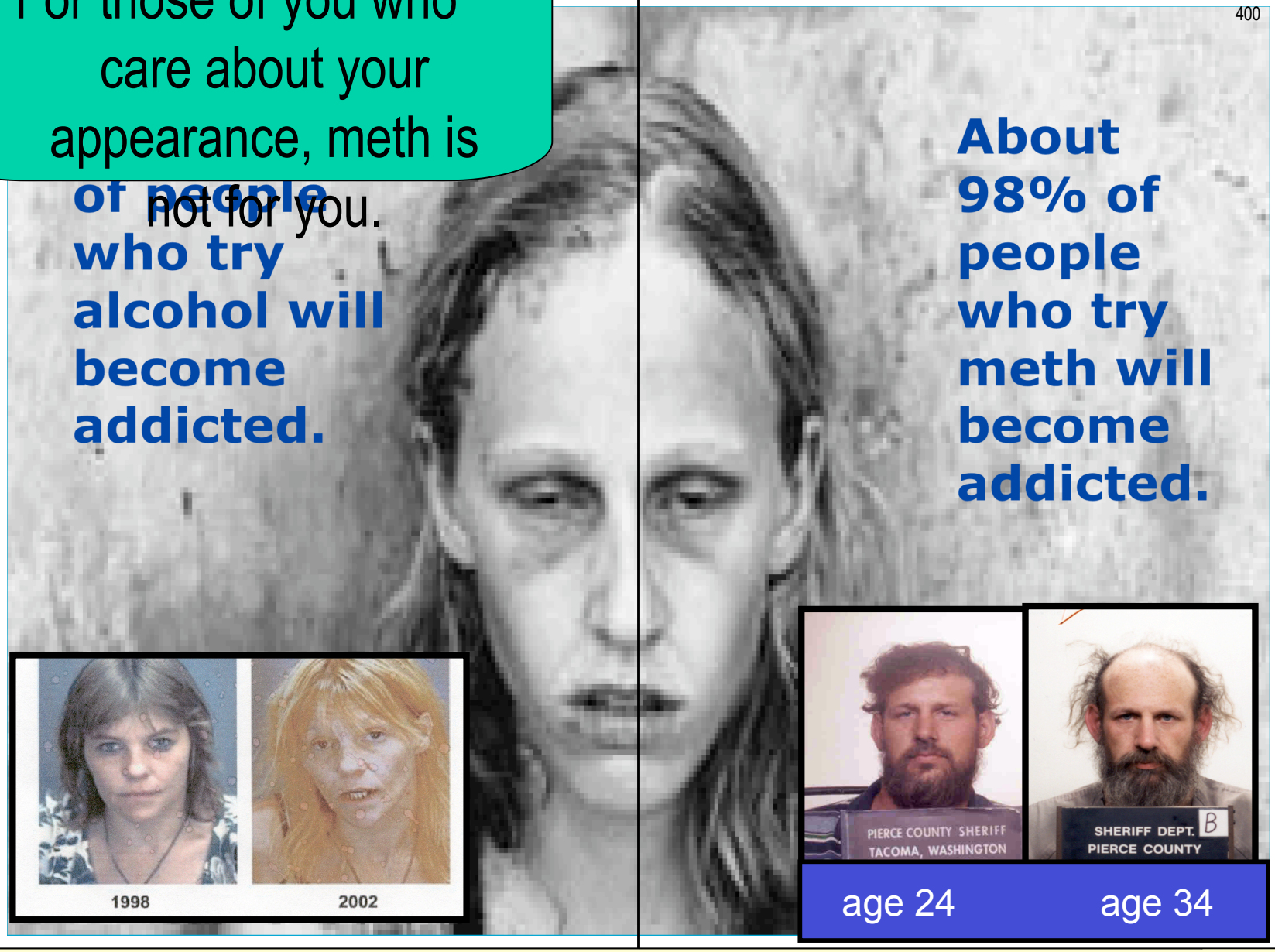

Age of First Use For Methamphetamine
Take a good look at this graph. It shows the age when users first tried meth.
Most people try meth between the age of 16 and 19, very similar to your ages.
People
2000
0
Under 7
8 to 11
12 to 15
16 to 19
20 to 23
24 to 27
28 to 31
32 to 35
36 to 39
40 to 43
44 +
Age

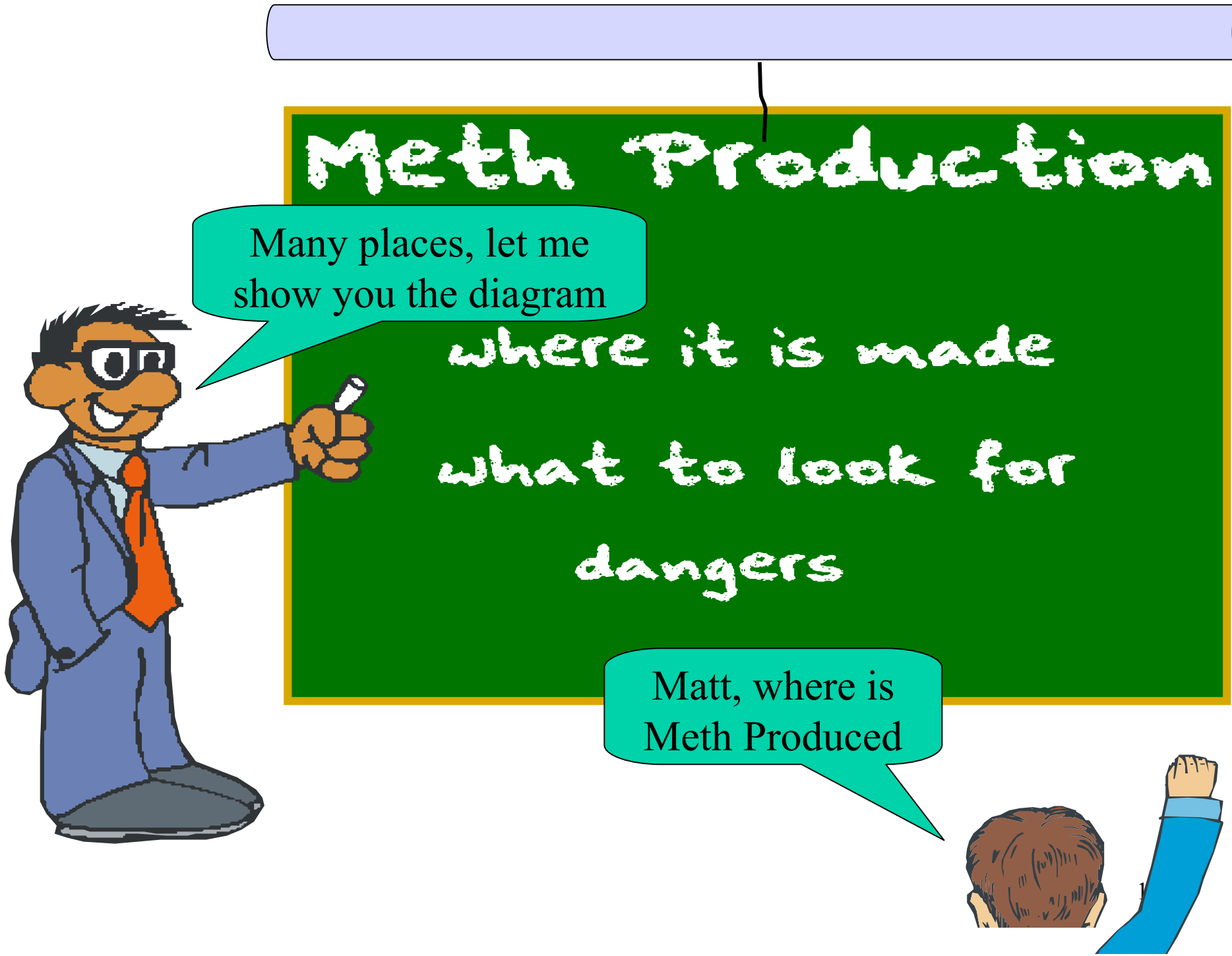

Now it's time to view the cycle of Meth use.
Changes in mood
False elevated self esteem
Decreased appetite
METH
Psychotic behavior
Unusual motor movements
Aggressiveness
Intensification of emotions

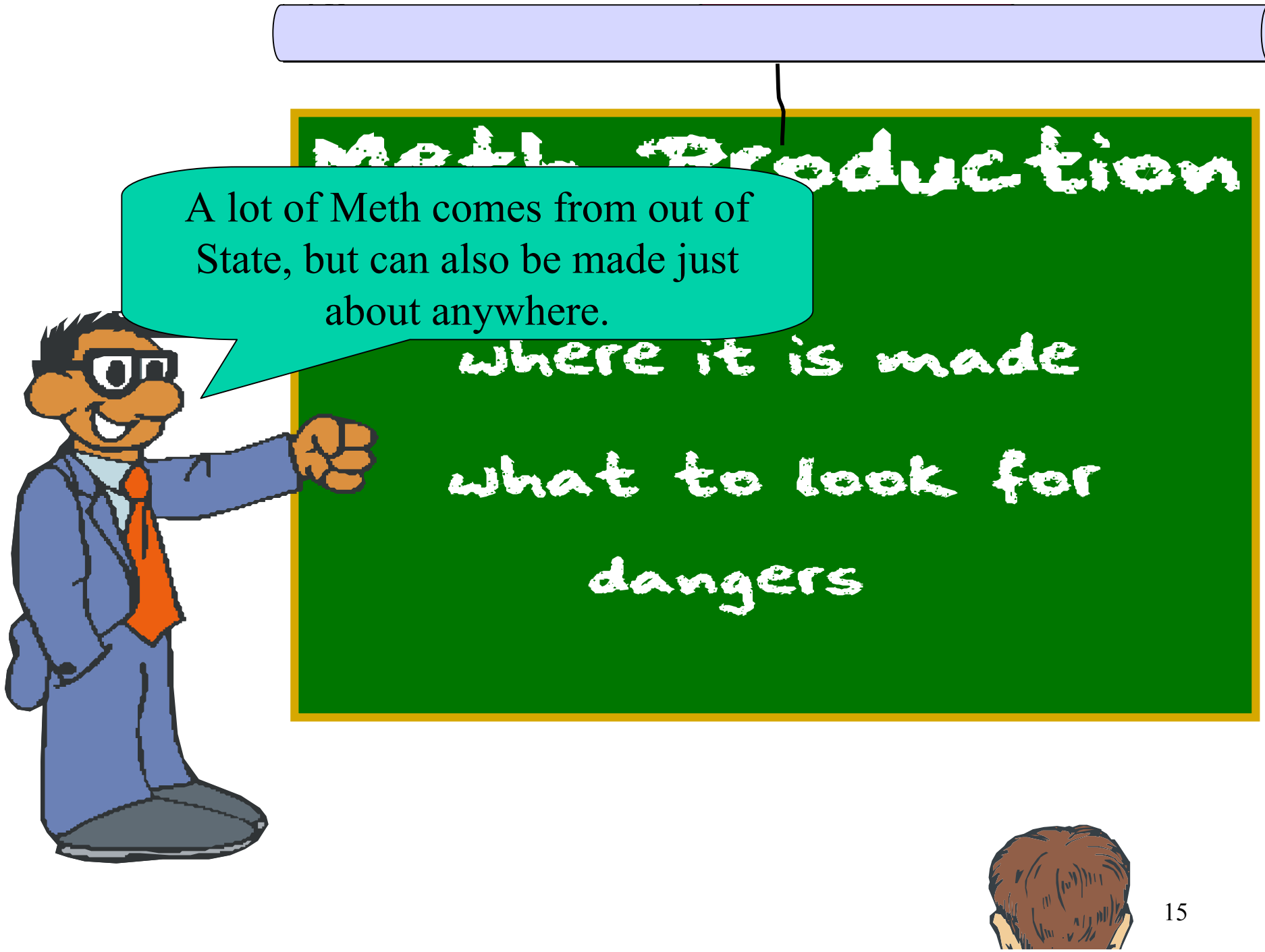
Cycle of meth use



For those of you who care about your appearance, meth is not for you.




Meth Production
where it is made
what to look for
dangers
Many places, let me show you the diagram
Matt, where is Meth Produced


Meth Production
A lot of Meth comes from out of State, but can also be made just about anywhere.
where it is made
what to look for
dangers

That's what you would be putting in your system if you tried meth.

...es in your body?

OH SNAP!

Precursors

A chemical that is essential to the production

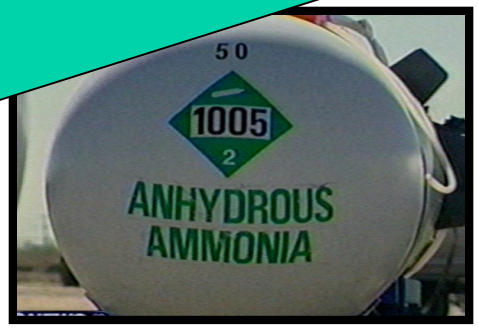
ance and for which no

can be made.

Pseudoephedrine/Ephedrine

2005 Montana Senate Bill No. 287 –
Act regulating sale of ephedrine and pseudoephedrine.

And lastly, large tanks containing anhydrous ammonia are often used as “nursing tanks” to transfer ammonia to small containers.



The blue-tinted top is an indication that this tank was used for anhydrous ammonia.

2005 Montana Senate Bill No. 166 – Making theft of anhydrous ammonia for manufacturing meth a felony.

2005 Montana House Bill No. 440 – Requires owner of anhydrous ammonia tank place a lock on the tank.

STAY AWAY!

Meth labs pose a serious threat to inhabitants, neighbors, law enforcement, property, and the environment.

Meth labs frequently explode and/or burn, emit dangerous fumes, and contaminate the buildings they are in and anyone around.


booby trap bombs

REPORT!

- If you or anyone you know suspects a meth lab or a meth lab dump site . . .

immediately call 911

- Meth producers are often paranoid, violent, and armed – **do not approach** them

"Tools for Schools" Meth Prevention Education Project

A project of the Montana Office of Public Instruction,
Linda McCulloch, State Superintendent of Public Instruction
Funded by Attorney General Mike McGrath and the Montana Department of Justice

"Tools for Schools" was developed by the MSU Meth Education Partnership under a grant from the Montana Office of Public Instruction, Contract #OPI104-994P.